Troubleshooting

General Troubleshooting Guide

Use the following table to find causes and solutions to a number of possible problems.

Symptom	Possible Cause	Solution
Communication never gets established or is lost (blinking communication indicator is consistently red)	**Battery is discharged or damaged**	**Plug the charger and if communication is established then charge battery as per procedure explained in the manual.**
	Computer is too far away from simulator	**Get simulator closer to computer**
	Trying to communicate with a different simulator	**Make sure to select the right simulator when opening the software.** **In a multiple simulator environment ("Setup/Options" menu), make sure to enter the right Serial Number**
	Starting more than one simulator simultaneously	**Select different channels for each of the simulators, and then try to turn them on one at a time, which means to wait until a link have been established between the tablet and the first simulator. Only after that, start the User Interface software in the second tablet, and so on for the rest of the simulators. To do so go to menu Setup -> Options-> Environment -> Select 'Auto change to channel: X' (X = number from 1 – 11).**
	All others	**Close the User Interface software and unplug the RF module for at least 5 seconds, then plug it back in. Restart the software and wait for initialization**
Simulator doesn't run for the time specified on the manual	**Battery not charge properly**	**Make sure that LED indicator on battery charger goes thru the sequence described in its label, usually red or orange after plugging it, and then green when charge is completed.** **If LED does not go thru label's indications, then:** • **Check plug connection making sure it is all the way in.** • **Make sure you are using the appropriate charger, which is labeled with its simulator name.**
Simulator doesn't respond to any command even that blinking communication indicator is consistently green	**The computer is properly communicating with a simulator, but not necessarily the one you intend to control**	**If you have more than one simulator in your facility, make sure that your computer is properly set-up to control the simulator that you wish to control. Go to Options... on the Setup pull-down menu and check the Environment preferences**
Commands are taking longer than usual to take effect or simulator is not	**Distance between computer and simulator is reaching its limit, or there are too many obstructions in between**	**Get simulator closer to computer or move away from obstructions.**

Symptom	Possible Cause	Solution
reporting every action (Signal strength indicator is low)	(walls, etc.)	
	There's too much RF interference either from another Gaumard tetherless simulator in the vicinity or an RF radiator	Try changing the RF channel by going to (menu) Setup -> Options-> Environment -> Select 'Auto change to channel: X' (X = number from 1 – 11).
Sound quality while streaming audio is poor	Noisy channel or another Gaumard tetherless simulator is nearby	Select a different channel (see "Options and more" section). When more than one simulator is in the vicinity, allow one channel between simulators.
	Computer too far from simulator	Streaming audio can't reach as far as normal data with a range of up to 150 ft. / 50 meters line of sight between simulator and PC. Keep antenna upright for maximum range.
	Sound too low or too loud	Sound volume at PC side is managed from PC"s volume control. Simulator sound volume is managed thru "Output Gain" slider under the "Speech/Streaming Options" tab. Always talk as close as possible as microphone in order to improve quality. Using a headset is recommended.
	Respiration and other undesirable sounds are heard by instructor	Since simulator's microphone sensitivity is high in order to capture the voice of providers, it also captures all surrounded noises on or around the simulator. This is normal and it is not a malfunction. Disable the tablet's onboard microphone and enable the headset input using the Windows audio setting.
Streaming audio does not work; streaming voice controls are not shown.	"Single" simulator is checked under "Setup/Options" menu.	Make sure to select multiple simulator environment ("Setup/Options" menu), and enter the Serial Number of the simulator you are trying to communicate. Streaming audio does not work when "Single" simulator is checked.
GaumardUI has set the power mode to STAND-BY automatically	The battery on the simulator is depleted	In Hal Revision 14 and lower, replace battery for a charged one. For S3004, S3009, and S3010, plug the external power supply. For all others including Hal Revision 15 and above plug in the charger.
"RF module not found" message is displayed when GaumardUI is started	RF module not connected	Connect the RF module to any USB port.
	RF module not identified by the computer.	Close the software and disconnect the RF module for 10 seconds, then plug it back in and restart the software
Chest compressions are not properly detected or not detected at all	Is the communication signal strength indicator consistently low?	See "Scan RF Channels" section
	Is the respiratory rate set to '0 / min'? Chest compressions are only detected when the respiratory rate is set to 0 per minute (0 / min).	Set respiration rate to zero

Symptom	Possible Cause	Solution
	Otherwise they are ignored	
	All others	See “Calibration” section
Artificial ventilations are not properly detected or not detected at all	Is the communication signal strength indicator consistently low?	See “Scan RF Channels” section
	All others	See “Calibration” section
Korotkoff sounds do not match systolic and/or diastolic set values	BP sensors are offset	Recalibrate BP cuff sensors on the simulator as per “Calibration” section
	Wrong placement of BP Cuff (only for simulators with tetherless BP cuff feature)	See correct cuff placement under section “Circulation”
Simulator’s chest does not rise with artificial ventilation (e.g. BVM)	Simulator is not running	In some simulators, the trachea is disconnected from the lungs when they are not on
	Disable lung/s	Enable the lungs from “Detail” page on the User Interface software
	Surgical insert is installed	The ventilation trachea insert provides a better seal for ventilation.
Low chest rise (or no chest rise at all) while breathing	Wrong settings or disable lungs	Make sure lungs are enabled and both respiration rate and inspiration percent are different than ‘0’. Try changing the respiration rate to a different value or turn the simulator off and then on again.
Loss of brachial pulse	Brachial pulses disable	Make sure to enable brachial pulse on “Details” tab page.
	Wrong reading of corresponding BP sensor	Brachial pulse is cut off when BP cuff pressure is above Systolic. If it is not connected, then recalibrate BP cuff sensors on the simulator as per “Calibration” section.
Reporting intubation when it is not	Wrong sensor reading	Reset “ET Tube” sensor on simulator as per “Calibration” section. Do not turn on (or power cycle) the simulator while being intubated, doing so would cause the sensor to report wrong intubations.
Pre-built scenarios don’t show up		Select “Quick Start Scenarios” when starting the software. Should user forget to do so, there’s no need to shut down the software and open it again in order to load the pre-built scenarios. Go to “File/Profile” menu and then select “Modeled Scenarios”
A sound is not heard or heard not at desired volume level Cyanosis intensity is too much or too little	Volume not set to user’s criteria	Every sound has a volume control. Play with volume control to get it to desired level

Symptom	Possible Cause	Solution
Cyanosis intensity is too much or too little	Cyanosis intensity not set to user's criteria	Set Cyanosis level to a desired level by playing with the "Set Max cyanosis level" control
Pupils (either one or both) dilating either while blinking or when not supposed to	Wrong dilation calibration	Set pupil dilation level properly by following procedure described in the manual under section "Options and more…" (see Tolerances Tab)
Pupils constricting-dilating constantly	This might happens either when the simulator is under intense light or wrongfully calibration	Try the "Set to Ambient Light" feature under "Options/Tolerances" (see section "Tolerances ").
Oximeter reading does not coincide with value set	Using a different Oximeter/Sensor for which the simulator was calibrated	• The simulator must be calibrated with the Oximeter instrument that it is going to be used (including the Pulse Oximeter Sensor). Oximeter Sensors cannot be swapped even with same kind of oximeter's brand and model. • An oximeter which includes carbon monoxide and/or methemoglobin sensing cannot be used. • Oximeter has been placed on the arm that doesn't have the O2Sat feature. Check in the Diagnostic if that arm has the feature installed
	Pulse Oximeter Sensor not properly placed	Make sure to slide the Pulse Oximeter Probe all the way into the simulator's finger. Make sure the emitter part (the red light) of the probe is on the nail side of the finger. If user is sure that the probe is properly placed, it means that it was not when calibration was performed, then re-calibration is necessary. See O2Sat calibration section for more info.
	Offset value within +/- 2	User should expect a +/- 2 discrepancy between value set and Oximeter reading for O2Sat values above 80%, and +/- 3 below 80%.
Drug ID is not being read	Syringe has not been programmed	See "IV Medication Infusion" section
	Syringe is not in the field of the RFID reader	This could happen when injecting the cephalic vein close to the hand and having the syringe sideways to the plane of the forearm.
	Wrong calibration	Calibrate the drug arm as per calibration instructions
	Injecting too fast	Maximum injection rate is 9999 ml/hr. This rate won't be exceeded when injecting into the veins using a 22 g needle.
	Not reading the syringe ID	If RFID tag on syringe is not read, the system tends to read fewer amounts than actually injected. This could happen when infusing the drug thru the side port on the arm. When doing so, place a tagged syringe on the syringe holder.

Symptom	Possible Cause	Solution
		See “IV Medication Infusion” section
	Fluid reservoir is full	The maximum amount of fluid injected properly read before purging the internal reservoir is 50 cc. Make sure to purge the reservoir or permanently connect a purging line (see instructions)
CO_2 not being exhaled	Empty CO_2 canister	Make sure the CO_2 canister is in place. For S3201, the User Interface displays the “Low CO_2” message when CO_2 pressure is low. Notice that CO_2 canister must be plug just before the training section starts to get maximum duration. If left overnight, the canister will slowly empty. (See “CO_2 exhalation” section). The CO_2 canister once it is plugged, will empty within 24 hours whether it is used or not.
	CO_2 pressure regulator is “OFF”	For S3201, go to “Calibration/Factory Settings” and then press the “CO_2 Pressure” button. In the window to the right a value between 3-6 psi (ideal 4.5 psi) indicates good level. Should not be the case, call tech support for advanced troubleshooting.
Mechanical Ventilator is not triggered when assisting the simulator	Settings exceeding the simulator’s capabilities	The simulator is able to trigger the ventilator either when: - Flow ≤ 1 Lts/min, or Pressure ≤ 1 cmH2O